UNITED STATES DISTRICT COURT DISTRICT OF MINNESOTA

REGENTS OF THE UNIVERSITY OF MINNESOTA,

Plaintiff,

Civil Action No. 14-cv-4666 JRT-TNL

v.

JURY TRIAL DEMANDED

AT&T MOBILITY LLC,

Defendant,

ERICSSON, INC., and ALCATEL LUCENT USA INC.,

Defendants-Intervenors.

REGENTS OF THE UNIVERSITY OF MINNESOTA,

Plaintiff,

v.

SPRINT SPECTRUM L.P., et al.,

Defendants,

ERICSSON, INC., ALCATEL LUCENT USA INC., and NOKIA SOLUTIONS AND NETWORKS US LLC,

Defendants-Intervenors.

Civil Action No. 14-cv-4669 JRT-TNL

JURY TRIAL DEMANDED

REGENTS OF THE UNIVERSITY OF MINNESOTA,

Plaintiff,

Civil Action No. 14-cv-4671 JRT-TNL

v.

JURY TRIAL DEMANDED

T-MOBILE USA, INC.,

Defendant,

ERICSSON, INC., ALCATEL LUCENT USA INC., and NOKIA SOLUTIONS AND NETWORKS US LLC,

Defendants-Intervenors.

REGENTS OF THE UNIVERSITY OF MINNESOTA,

Plaintiff,

v.

CELLCO PARTNERSHIP D/B/A VERIZON WIRELESS,

Defendant,

ERICSSON, INC., and ALCATEL LUCENT USA INC.,

Defendants-Intervenors.

Civil Action No. 14-cv-4672 JRT-TNL

JURY TRIAL DEMANDED

JOINT CLAIM CONSTRUCTION STATEMENT

Pursuant to Paragraph V(d) of the Court's Third Amended Scheduling Orders ("Scheduling Order") dated September 20, 2016 (*See, e.g.*, Docket No. 151 in case - 4666) Regents of the University of Minnesota ("University"), AT&T Mobility LLC ("AT&T"), Sprint Spectrum L.P. and Sprint Solutions, Inc. (collectively "Sprint"), T-Mobile USA, Inc. ("T-Mobile"), Cellco Partnership d/b/a Verizon Wireless ("Verizon"), Ericsson, Inc. ("Ericsson"), Alcatel-Lucent USA Inc. ("ALU"), and Nokia Solutions and Networks US LLC ("NSN") hereby jointly submit this Joint Claim Construction Statement.

1. Claim Construction Hearing

The parties request that the Court schedule a claim construction hearing. The parties propose that the Court hold a hearing on March 29, 2016. The parties further propose that each side be given two hours of total argument (i.e., the University will have two hours and the Defendants/Intervenors will have two hours), and that the disputed claim terms be argued on a term-by-term basis. Of course the parties are happy to accommodate the Court's preferred schedule and hearing format.

The parties additionally believe that a technology tutorial would be helpful to the Court in understanding the parties' disputes. The parties propose a three-hour technology tutorial in advance of the claim construction hearing at a time that's convenient for the Court. At the technology tutorial, each side would be permitted one and one half hours for a presentation regarding the technology at issue and there would be no submission of evidence.

The parties do not believe that a pre-claim construction conference is necessary.

2. Claim Construction Briefing

The parties propose that each side file an opening brief setting forth their proposed constructions of any disputed terms and the basis for each such construction on a date eight weeks before the claim construction hearing. The parties further propose that each side file responsive briefs on a date four weeks before the claim construction hearing. The parties propose that the parties' briefing be limited to a total of 20,000 words each.

3. Agreed Upon Constructions

Pursuant to Paragraph V(e)(ii)(1) of the Scheduling Order, the parties agree on the following constructions:

Terms	Agreed Constructions
"that are not restricted by the constellation of the information bearing symbols" / "that are not restricted to the finite alphabet of the constellation"	"that include symbols not in the constellation"
"unitary matrix"	"a square matrix whose conjugate transpose is equal to its inverse".
"Nt"	"number of transmit antennas"
"diagonal matrix"	A matrix having non-zero values only on the diagonal.
"block[] of symbols"	Block of symbols: "A group of symbols for transmission at a given time" Blocks of symbols: "more than one block of symbols"
Cyclic prefix length	The duration of a cyclic prefix
Cyclic prefix parameter	A parameter representing the duration of the cyclic prefix

The parties further agree that the terms of the patents-in-suit other than those identified above and in Exhibits A and B, for which the parties offer proposed constructions, should be given their plain and ordinary meaning consistent with Federal Circuit law.

4. Proposed Constructions and Evidence

Pursuant to Paragraph V(e)(ii)(2) of the Scheduling Order, Plaintiff attaches hereto **Exhibit A** and Defendants attach hereto **Exhibit B**, which set forth the parties' proposed constructions of each disputed claim term, phrase, or clause together with an identification of intrinsic evidence that support that construction, and an identification of any extrinsic evidence known to the party on which it intends to rely either in support of its proposed construction of the claim or to oppose any other party's proposed construction of the claim.

5. Witnesses and Expert Discovery

Pursuant to Paragraph V(e)(ii)(3) of the Scheduling Order, Plaintiff identifies its expert witnesses, Dr. Jonathan Wells and Dr. Harry Bims. Plaintiff's experts may offer testimony in support of Plaintiff's constructions or to rebut Defendants' constructions. Defendants identify their expert witnesses, Dr. Alex Haimovich, Dr. Daniel van der Weide, and Dr. Stephen Wicker. Defendants' experts may offer testimony in support of Defendants' constructions or to rebut Plaintiff's constructions.

The parties propose making their respective experts available for live testimony at the claim construction hearing and at the technology tutorial, should the Court have any questions for the experts. The parties further propose that expert opinions be submitted via declaration along with a party's respective opening or responsive claim construction briefs. The parties further propose that any depositions concerning claim construction experts be completed in the time between the filing of the parties' responsive claim construction briefs and one week before the claim construction hearing.

6. Technical Advisor

Defendants' Proposal

Defendants believe that a technical advisor would be helpful to the Court in understanding the parties' disputes. As Judge Leung noted in his Report and Recommendation Denying Defendants' Motion to Reduce Asserted Claims¹, the patentsin-suit relate to "an extremely complicated technology. . . ." The parties expect to brief highly technical issues, including disputes regarding the nature of mathematical operations, such as linear transformations, matrix multiplication, spreading sequences, and Hadamard matrices, as well as physical layer processing techniques used to provide diversity in wireless communications systems, such as signal constellations, bit and symbol interleaving, and phase rotations. Defendants expect the parties to provide competing expert opinions regarding these issues, and as such, Defendants believe a neutral technical advisor would be helpful for the Court. Should the Court wish to appoint a technical advisor, Defendants are willing to meet and confer with Plaintiff in an effort to mutually agree on a technical advisor to recommend to the Court. Judge Schiltz recently utilized a similar procedure in a case involving complex technology and noted that the "technical advisor has been extremely helpful." See Mastermine Software, Inc. v. Microsoft Corp., 0:13-cv-00971, Dkt. No. 211 (May 6, 2016).

¹ Dkt. Nos. 189, 206, 212, and 213.

Plaintiff's Proposal

Plaintiff does not believe a technical advisor would be helpful in this case. As set forth above, the parties anticipate having their respective technical experts available for both the technology tutorial and the claim construction hearing. Should the Court have technical inquiries, these experts will be more than capable of addressing the particular subject matter of the patents-in-suit. Given the specialized nature of the technology at issue, locating a neutral technical advisor would likely be a difficult and time consuming process that is unnecessary given that the parties can provide expert assistance should the Court desire.

Dated: December 21, 2016 FISH & RICHARDSON P.C.

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Respectfully submitted,

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